

***Astragalus arthurii* Jones**

Arthur's milk-vetch
Fabaceae (Pea Family)

Status: State Sensitive

Rank: G5S2S3

General Description: Greenish perennial from a stout taproot and branched crown; stems numerous, ascending or erect, 8-16 inches long; leaves 3-5 inches long; stipules lanceolate, $\frac{1}{8}$ to $\frac{3}{16}$ inch long, not attached; leaflets 17-29, oblong-elliptic, $\frac{1}{4}$ to $\frac{1}{2}$ inch long, $\frac{1}{16}$ to $\frac{1}{8}$ inch broad, glabrous on the upper surface; racemes loosely 5 to 30 flowered; pedicels $\frac{1}{16}$ to $\frac{1}{4}$ inch long; flowers white, spreading or drooping, $\frac{3}{16}$ to $\frac{1}{2}$ inch long; calyx $\frac{1}{4}$ to $\frac{5}{16}$ inch long, the oblong-triangular teeth about half the length of the tube; banner erect, the wings about $\frac{1}{16}$ inch longer than the rounded keel; pod spreading to reflexed, stipitate, the body $1\frac{1}{4}$ to 2 inches long, $\frac{1}{8}$ inch broad, compressed.

Identification Tips: The extremely long (about 10 times longer than wide), slender, linear-fusiform pods are the most distinctive feature of the species.

Phenology: Identifiable from mid-April through early July. Mostly in fruit by mid-July.

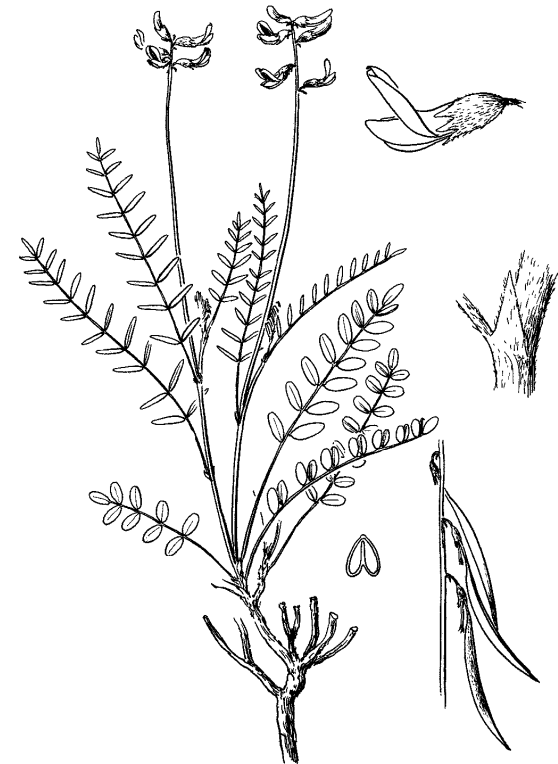
Range: Regional endemic; extreme southeast corner of WA south and east to northeast Wallowa County in Oregon, and Nez Perce and Idaho counties, Idaho. In WA it occurs in Asotin County along the Snake River and the Asotin Creek drainage in the Columbia Basin physiographic province.

Habitat: Dry grassy hills and stony meadows, on basalt. Associated with bluebunch wheatgrass (*Agropyron spicatum*), Sandberg's bluegrass (*Poa sandbergii*), Idaho fescue (*Festuca idahoensis*), threadleaf phacelia (*Phacelia linearis*), nine-leaf desert-parsley (*Lomatium triternatum*), Wyeth buckwheat (*Eriogonum heracleoides*), and lupine (*Lupinus* spp.). Elevation: 800 to 3700 feet.

Ecology: This species occurs within Daubenmire's (1970) *Agropyron spicatum*-*Festuca idahoensis* habitat type. This habitat type has a general lack of shrubs and lower cover of perennial herbaceous species. Fires and grazing activity tend to

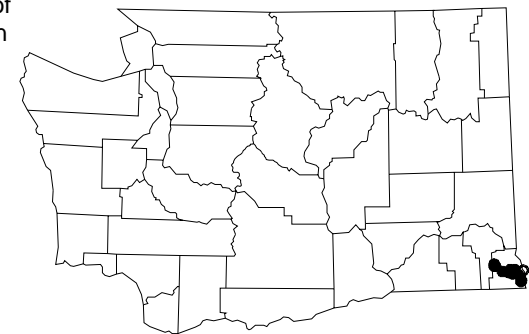
Astragalus arthurii

Arthur's milk-vetch



©1961 University of Washington Press. Illustration by Jeanne R. Janish.

Known distribution of
Astragalus arthurii in
Washington



● Current (1980+)
○ Historic (older than 1980)

Astragalus arthurii

Arthur's milk-vetch



Photo by Reid Schuller



Photo by Reid Schuller

Astragalus arthurii

Arthur's milk-vetch

Ecology (continued): increase the cover of weedy annuals. This is a nitrogen-fixing species which occurs on substrates suspected of being low in nitrogen.

State Status Comments: The species is a rare, regional endemic. The main area of the range of this species does not exceed 50 miles in diameter.

Inventory Needs: Historical occurrences should be relocated and inventoried. Known occurrences should be revisited to determine population trends. Additional inventory throughout its range in WA is needed.

Threats and Management Concerns: Some recent occurrences are known to be in horse and cattle grazing areas. Agricultural practices such as herbicide use could be a threat to this species.

References:

Daubenmire, R. 1970. *Steppe vegetation of Washington*. Wash. Agric. Exp. Stn. Tech. Bull. 62. 131p.

Hitchcock, C. L., A. Cronquist, M. Ownbey, and J.W. Thompson. 1961. *Vascular Plants of the Pacific Northwest, Part 3: Saxifragaceae to Ericaceae*. University of Washington Press, Seattle. 614 pp.